

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-19 (canceled)

Claim 20 (new): A method for audio conferencing, the method comprising:

receiving audio signals at input circuitry, each said received audio signal associated with a conference participant;

for each said received audio signal, providing, using said input circuitry, a digitized audio signal and a speech bit, said digitized audio signal and said speech bit associated with each other and with said received audio signal, each said speech bit indicating whether its associated digitized audio signal includes voice data;

receiving said digitized audio signals and said speech bits at an audio conference mixer;

summing, with said audio conference mixer, digitized audio signals having speech bits indicative of the inclusion of said voice data, thereby providing a summed conference signal; and

providing, with said audio conference mixer, a conference list listing conference participants associated with said digitized audio signals including said voice data.

Claim 21 (new): The method of claim 20 further comprising:

receiving said summed conference signal and said conference list at processing circuitry; and

providing, with said processing circuitry, said summed conference signal to each conference participant not listed on said conference list.

Claim 22 (new): The method of claim 21 further comprising:

for each said listed conference participant, removing, using said processing circuitry, the digitized audio signal associated with each said listed conference participant

from said summed signal, thereby providing a customized conference audio signal to each said listed conference participant.

Claim 23 (new): The method of claim 20 further comprising:

determining whether at least one Dual Tone Multi-Frequency (DTMF) tone is present in each said received audio signal; and

for each said received audio signal, providing a DTMF detection bit indicative of whether or not each said received audio signal includes said at least one DTMF tone.

Claim 24 (new): The method of claim 23 wherein said summing comprises:

omitting from said summed conference signal received digitized audio signals provided from received audio signals in which said at least one DTMF tone is present.

Claim 25 (new): A method for audio conferencing, the method comprising:

receiving a plurality of audio signals at a network interface circuit, each said audio signal associated with a conference participant;

for each said received audio signal, providing, using said network interface circuit, a digitized audio signal in an assigned time slot over a data bus, the provided digitized audio signal associated with each said received audio signal and each said received audio signal's associated conference participant;

receiving, at a first of a plurality of digital signal processors, digitized audio signals associated with conference participants who are speaking;

summing, at said first digital signal processor, said received digitized audio signals associated with said speaking conference participants, thereby generating a summed conference signal;

providing, to a second of said plurality of digital signal processors, said summed conference signal and a conference list listing said speaking conference participants;

for each said listed conference participant, removing, at said second digital signal processor, the digitized audio signal associated with each said listed conference participant, thereby generating a customized conference audio signal associated with each said listed conference participant; and

providing to each said listed conference participant the customized conference audio signal associated with each said listed conference participant.

Claim 26 (new): The method of claim 25 further comprising:
providing a system bus and a controller;
providing communication between said controller and said plurality of digital signal processors over said system bus; and
downloading executable program instructions from said controller to said plurality of digital signal processors.

Claim 27 (new): The method of claim 25 further comprising:
configuring said first digital signal processor as an audio conference mixer; and
configuring said second digital signal processor as an audio processor.

Claim 28 (new): The method of claim 20 wherein said conference list comprises a plurality of conference bits, each said conference bit uniquely associated with one of said digitized audio signals.

Claim 29 (new): The method of claim 27 further comprising:
computing, at said audio processor, an audio detection threshold value based on values of said received audio signals;
comparing, at said audio processor, said values of said received audio signals to said computed audio detection threshold;
determining, at said audio processor, which of said received audio signals include speech based on said comparing; and
providing a speech list based on said determining, said speech list including speech bits, each said speech bit associated with one of said received audio signals and indicating whether or not its associated received audio signal includes speech.

Claim 30 (new): The method of claim 29 wherein said summing comprises:

summing received digitized audio signals provided from received audio signals associated with speech bits indicating the presence of speech.

Claim 31 (new): The method of claim 27 further comprising:

providing a data bus; and

providing communication between said audio conference mixer and said audio processor over said data bus.